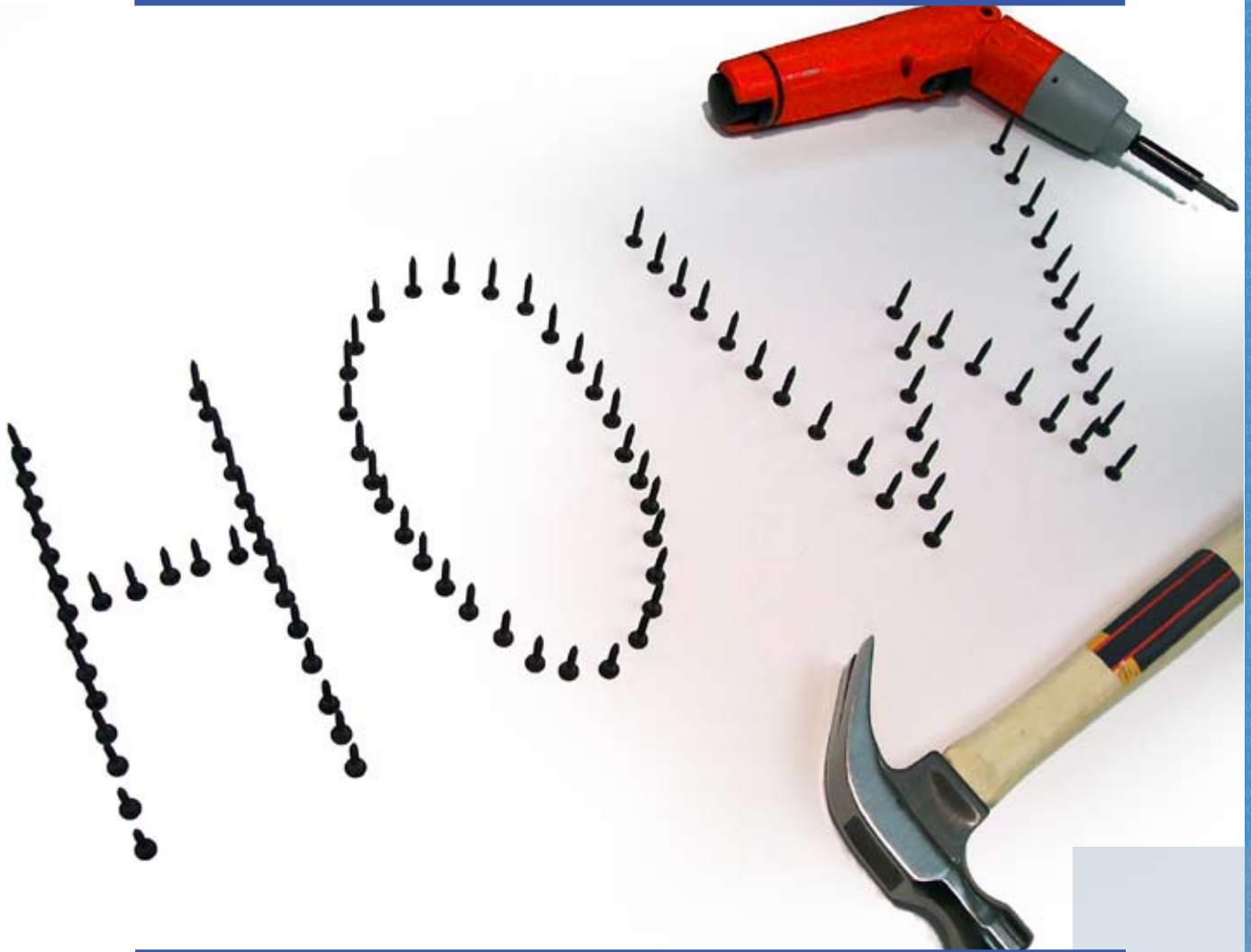




*Mail and Web Security*



# **NetCleanse Trouble Shooting**

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# Helping Customers

**NetCleanse is an anti-spam and anti-virus product.**

**This document will help you trouble-shoot NetCleanse installations.**

**NetCleanse is largely an automatically configuring product. Our engineers perform remote health checks of every NetCleanse installation six times an hour at a minimum. However, here are brief technical notes explaining the major support issues callers to our support desk have.**

## Basic Installation

**You need a dedicated machine on which NetCleanse can be installed. You have a generic 10/100 network card (i.e. 3Com, Intel) (Not Integrated on the board.)**

**The machine has a Pentium 4 minimum**

**It has a floppy disk drive**

**The power management settings on the machine are turned off (in the BIOS)**

**The hard drives are not set to "Cable Select". This setting is made at the back of the hard drive.**

**The machine is situated such that it is able to get out of the network**

**It is recommended that NetCleanse be positioned outside your firewall. This is not a security risk as the NetCleanse Linux Kernel has been hardened by removing the GUI.**

**In order to run NetCleanse outside your firewall, a dedicated public IP is needed.**

**90 per cent of the installation issues result from client-side issues.**

**Where NetCleanse is installed is the first question that must be asked in a tech support call. NetCleanse's location determines what ports should be open or closed, and whether public or private IPs should be used.**

# Getting started

## Installation Overview

### *What is NetCleanse?*

NetCleanse is an automated communication security service protecting Internet communication from spam and viruses. NetCleanse combines the convenience of automated updates with the security of owning and hosting your own server. NetCleanse protects against viruses and spam at the SMTP level, while also screening HTTP and FTP at the gateway.

- It can reside outside the firewall
- It can reside on the DMZ or behind the firewall

## Downloading NetCleanse

### *Creating your account and install disc*

- Go to NetCleanse.Com
- Select Download
- Read and agree to the license

Enter the corporate information needed. This is the contact information used for billing as well as emergencies. NetCleanse may need to contact the network administrators of customers so please ensure that telephone numbers and e-mail addresses remain current.

### **IP information:**

- Enter IP information
- IP of NetCleanse unit
- Default Gateway
- NetMask of NetCleanse Unit
- DNS Server 1
- DNS Server 2
- Primary Domain Name

Ensure that the customer double and triple checks that the information here has been entered correctly. Incorrect information in this form will cause difficulties in the installation and operation of NetCleanse.

Connection Information:	
Network IP Address of NETCLEANSE unit:	<input type="text"/>
Net Mask of NETCLEANSE unit:	<input type="text"/>
Default Gateway of Network:	<input type="text"/>
DNS Server 1: (usually at the ISP)	<input type="text"/>
DNS Server 2: (usually at the ISP)	<input type="text"/>
Domain Name Information	
Primary Domain Name: (more can be added later)	<input type="text"/>
Web Administration Details:	
User Name (8 - 10 characters):	<input type="text"/>
Password (8 - 10 characters):	<input type="text"/>
Re-enter Password:	<input type="text"/>

# The boot disc

## Creating a boot disc

*Once the installation forms are complete and submitted, the customer should receive an e-mail with the Evaluation ID from NetCleanse Support and an executable boot-builder application.*

Diagnosis: If no e-mail has arrived the user may have entered the wrong e-mail address when creating a NetCleanse account, or some filter on the user side has diverted the mail and application.

If for some reason the boot disc does not get created, re-enter the evaluation ID that was forwarded in the e-mail from Support@NetCleanse.Com. Please copy and paste the ID to avoid retyping errors. If further errors persist, contact support@netcleanse.com.

## Boot Disc Issues

Aside from formatting the floppy, the only issue clients can encounter with boot discs is if the IP information entered in the form does not match the IP information of the server location.

Diagnosis: Verify with the client that the IP information used to create the boot disc matches the IP addresses of the actual installation unit.

- Tip: Ask when the boot disc was created. Then ask the customer if renovations have been made to their network since that disc was created.
- Advanced: Check the .cfg file on the boot disc using NotePad but DO NOT MODIFY THIS FILE. Modifying this file corrupts the boot disc.



# Installation

## Server Issues

*The installation process fails after the server boots.*

- The error message 'ide\_pci' followed by a hex address.

Diagnosis: SATA drive in the server. As of this moment, SATA volumes are not supported. Replace the mechanism with an IDE or supported SCSI device.

- Error message 'not able to write to disc'

Diagnosis: The hard drive cable select setting must NOT be employed

- Prompted for any information (Language, etc.)

Diagnosis: it means the config file was not found for this installation. Either the user has modified his config file by hand on a Windows system or there is an incompatible network card. Resolution: recreate the boot disc.

- The error message 'Select Installation Media' means the network card is not recognized.

Diagnosis: Unsupported NIC.

## Cannot Connect to FTP server

*The most common error message?*

- Error message 'NetCleanse fails to log into a FTP server'

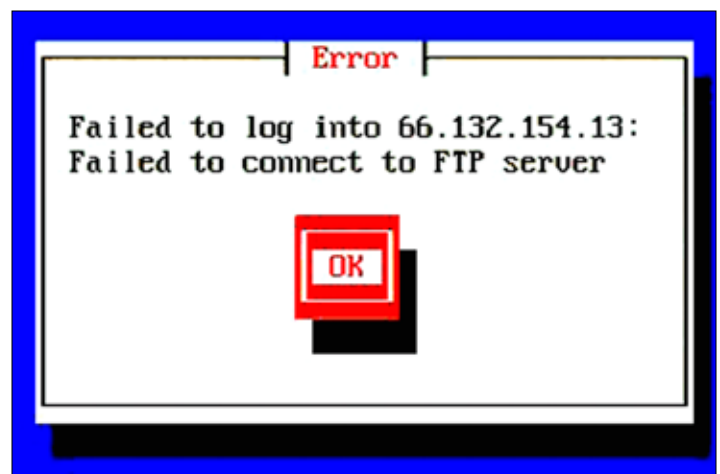
The NetCleanse installation process is straightforward and the system can live on any network, however, one non-negotiable item is that the ports MUST be open. If NetCleanse cannot communicate with the operations centres, then the server cannot be created. The most common message is Failed to connect to FTP server.

Diagnosis: NetCleanse will fail to log into the FTP server. Resolution: Firewall ports must have TCP and UDP ports open.

## 90 per cent of client-side issues occur at this point of the installation

*More often than not, the causes are connectivity problems. Here are some tests the customer can run.*

- Plug the internet cable into a laptop to confirm that the cable connects to the internet
- If there is an on-board NIC, make certain that the power is off in the BIOS
- Make sure that the internet cable has been plugged into the correct ethernet port
- Make certain that the cable from the NetCleanse server is plugged into the correct switch on the router
- Change the network card
- Make sure that necessary ports are open. In particular, 22 inbound and outbound as well as port 21 outbound. To test ports, open a telnet session on that port of the server



# Installation Part 2

## Post download issues

The time needed to complete the NetCleanse installation is on average 30 minutes.

- After the installation, remove the floppy disc.
- Reboot the server. The server will download additional software. This process takes approximately 20 minutes.

The server will conduct several network tests. The status of these tests are reported on screen. If there is any failure to complete any of these tests, ask the customer to relay the on screen data for diagnosis.

The customer will now be prompted to confirm the installation. Do this by hitting 'enter'. When the log-in screen is presented, the installation has been successfully completed.

This is a root log in to the system and is NOT used. The configuration of the system is done through the log-in at the NetCleanse.Com web site.

## Installation Locations

*Installing your server outside the firewall requires*

- A dedicated Public IP
- A changed MX record or DNS entry to point to that Public IP

*Installing your server on the DMZ or behind your firewall. A dedicated Private IP is required. Open the following ports:*

- Port 21 outbound
- Port 22 inbound and outbound (ssh)
- Port 25 mapping to point SMTP traffic to that Private IP
- Port 25 must be open inbound and outbound (e-mail traffic)
- Port 37 outbound (time server)
- Port 53 outbound
- Port 80 outbound (download pattern files)
- Port 6277 outbound

The installation is complete. It is now time for the customer to configure the NetCleanse system.



# First Log - In

## Logging into NetCleanse for the first time

*After successfully installing the NetCleanse server at your location, administrators must enable it.*

This is done the first time the NetCleanse administrator logs in the administrative log-in on the NetCleanse web site. To activate NetCleanse after an installation, please run the Install Wizard from the NetCleanse Administrative web site. This is found in the Server Config tab.

This will:

- Set the Domains to be protected
- Set the Local IPs
- Configure Virus Scanning
- Configure Spam settings



# Hardware

## Hard drives

- The size of hard drive varies depending upon the load of mail. At minimum, a 36 gig hard drive is required. Currently, SATA drives are not supported, but IDE and SCSI are. Hard drives must not be set to Cable Select. This setting is configured at the back of the drive. See the documentation supplied by the hard drive's manufacturer for details.

## USB not supported

- Because the creation of a NetCleanse server requires booting from a custom floppy disc, USB-based floppy drives are not supported.

## Processor and RAM

*Small - 2,000 mail/hour + 100 concurrent connections*

- A - 2.4 GHz Pentium 4 processor, 1 Gig RAM, 36Gb hard drive
- 4,000 mail/hour
- 400 concurrent Internet connections

*Medium - 4,000 mail/hour + 300 concurrent Internet connections*

- 3.2 GHz Pentium 4 processor, 1.5 Gb RAM, 40Gb hard drive
- 7,000 mail/hour
- 600 concurrent Internet connections

*Large - 8,000 mail/hour + 600 concurrent connections*

- 3.6 GHz Pentium 4, 2Gb RAM, 60Gb hard drive
- 10,000 mail/hour
- 900 concurrent Internet connections

Networks with heavy e-mail traffic may require multiple NetCleanse servers to split the load. Because NetCleanse was built to service ISPs and VISPs, this is accomplished easily.

A second NetCleanse server can always be added for testing or back-up. Because NetCleanse is licensed per user, there are no additional licensing fees for adding multiple servers.

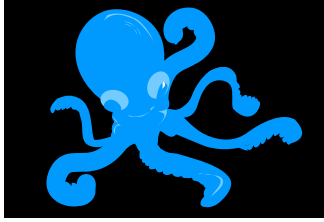
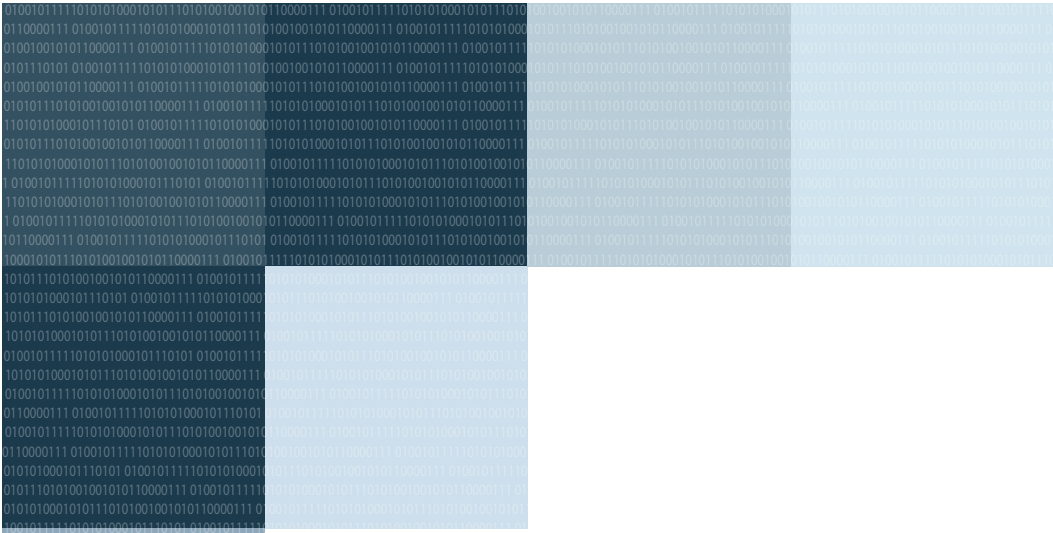
If additional servers or a load balancer are required, direct the enquiry to [support@netcleanse.com](mailto:support@netcleanse.com)

## System slowness

The small unit recommendations will provide excellent service for most customers. However, ensure that the customer's system is not obviously below strength:

- No Pentium 3 CPUs
- Direct the customer to log into the NetCleanse administrative page at [NetCleanse.Com](http://NetCleanse.Com) to check the server stats page. These statistics update every 10 minutes.. If the system is running at 50 per cent during peak hours, the customer should consider upgrading the hardware.





# NETCLEANSE

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